

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 22 NOV 2005

WIPO

PCT

Applicant's or agent's file reference 209546-81655	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/US2004/026323	International filing date (day/month/year) 11.08.2004	Priority date (day/month/year) 14.08.2003	
International Patent Classification (IPC) or national classification and IPC B60R13/02, B32B5/22			
Applicant INTIER AUTOMOTIVE INC. et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 26.05.2005		Date of completion of this report 21.11.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Derz, T Telephone No. +31 70 340-	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/US2004/026323

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1-4 as originally filed

Claims, Numbers

1-12 as originally filed

Drawings, Sheets

1/1 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/US2004/026323

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-12
	No: Claims	
Inventive step (IS)	Yes: Claims	1-12
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-12
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/US2004/026323

Re Item V.

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: EP-A-0 671 259 (R+S TECHNIK GMBH) 13 September 1995 (1995-09-13)
- D2: DE 197 06 839 A1 (MOELLER PLAST GMBH, 33649 BIELEFELD, DE;
MOELLER PLAST GMBH) 27 August 1998 (1998-08-27)
- D3: EP-A-0 640 467 (GENERAL ELECTRIC COMPANY) 1 March 1995
- D4: EP-A-0 774 343 (PLASTIFOL GMBH & CO KG; LEAR CORPORATION GMBH
& CO. KG) 21 May 1997 (1997-05-21)

1) Novelty

The present application does satisfy the criterion set forth in Article 33(2) PCT because the subject-matter of Claim 1 is novel over the prior art (Rule 64(1)-(3) PCT):

The document **D1** is regarded as being the closest prior art to the subject-matter of claim 1 and shows (the references in parentheses applying to this document):

a laminated plate which can be used as a headliner contains a core and a cover layer. The core is of natural fibres. The natural fibres are of straw, and they can also contain glass fibres or polyester fibres. The pref. bonding agent derives from the partially melted polypropylene or polypropylene fibres.

A synthetic foam can be used as an intermediate layer. The **technically distinguishing features of D1** are the partial melting of the polymer fibers which provide the thermoplastic binder material for the natural and glass fibers and the absence of specific information on the density (or weight per area) of that reinforcement layer.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

2) Inventive Step

The present application does also satisfy the criterion set forth in Article 33(3) PCT because the subject-matter of Claims 1-12 does involve an inventive step (Rule 65(1)(2) PCT):

The **problem** to be solved by the present invention may be regarded as providing dimensional stability to vehicle panel structures while **reducing the thickness** and the **weight (called 'linear density' in claim 1, which is weight/area)**.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

no other retrieved document of the prior art which comprised glass fibers and thermoplastic fibers did disclose the density (or a derived property) of the reinforcement layer. No other document discloses weight reduction as a problem or contributes to its solution.

All thermoplastic fibers of the retrieved documents undergo at least partial melting, thereby losing its fibrous structure. With hindsight the examiner can deduct that the bulk density of the prior art panel layers thereby will be higher compared to the case where these fibers would not lose their fibrous structure.

There is nothing in the retrieved prior art which suggests or teaches that a panel of fiberglass and polymer fibers could have an weight per area of 50-200 g/m and how to achieve that. The present application (claims 7-8) applies a further, lower melting thermoplastic as a binder material to the fibrous blend structure.

Claims 2-12 are dependent on claim 1 and as such also meets the requirements of the PCT with respect to novelty and inventive step.

Re Item VII

Certain defects in the international application

3. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 to D4 is not mentioned in the description, nor is/are

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/US2004/026323

this/these document/s identified therein.